

HUB RESEARCH & DEVELOPMENT CO., INC.

50150043 Task 3939
cc: Wayne
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Mr. Wayne Western.
Mr. Paul Baker.
State Of Utah Department of Natural Resources
Division of Oil, Gas, & Mining
1594 West North Temple
Salt Lake City, Utah USA 84114 -5801
(801) 538-5340 fax (801) 359-3940
www.ogm.utah.gov

Dear Sirs.

Enclosed, please find the attached document as requested for your consideration. This is pursuant to our re-evaluation agreement, concerning our existing reclamation bond, currently in place for the Miller Rock mine site, as amended and accepted by the Division in 2006.

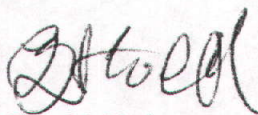
As requested, the enclosed proposal or reclamation agreement includes the removal of all such surface items currently in place. This includes any and all vehicles, equipment and or surface structures, as well as any remaining surface debris at the time of reclamation.

Throughout this site's history, it has been our standard procedure to keep all surface disturbances to a minimum; thus preventing the needless degradation of the surrounding areas. After three generations of continuous operation, we remain committed to this ideal.

If you have any questions concerning the attached Reclamation Estimate please let me know.

I may be reached at the above number Monday through Friday between the hours of 8:30 AM and 4:00 PM. Thank you.

Sincerely,

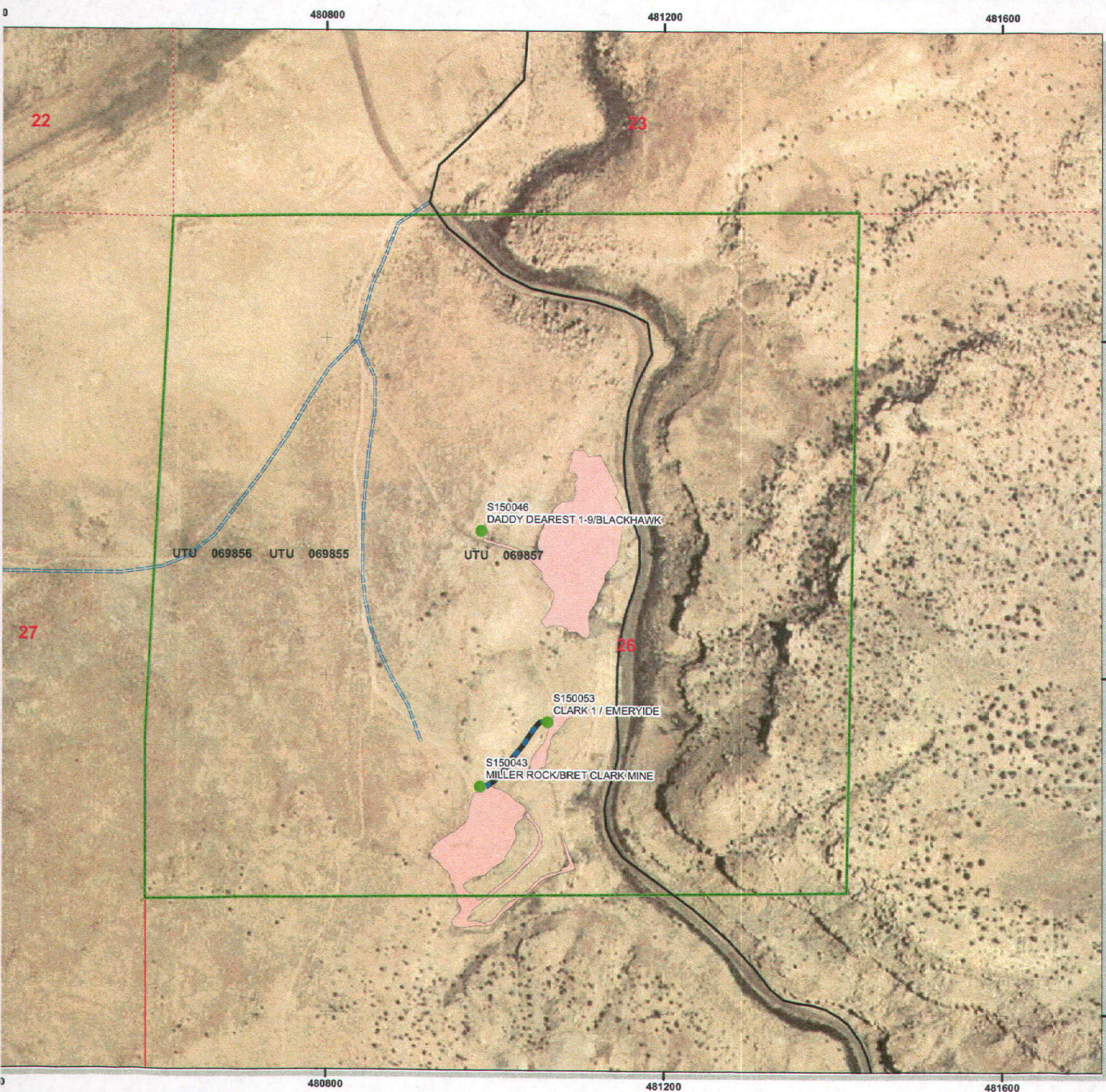


Bret W. Clark
Miller Rock Mine

RECEIVED

FEB 14 2011

DIV. OF OIL, GAS & MINING



Mine Number: S0150043
Mine Name: MILLER ROCK/BRET CLARK MINE
Township 22 S Range 06 E Section 26 SLBM

Inspection Date Dec. 15, 2006
 Map Produced by DKS

Acres Disturbed	2.36
Acres Regraded	0
Acres Seeded	0
Road Acres Disturbed	0

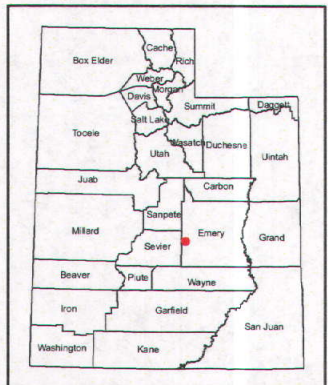
Total Acres Disturbed 2.36

Acres Released	0
Acres Excluded	0
Acres PreExisting	0
Acres Prelaw	0

Legend
 All items symbolized in legend may not be appear on map

- | | |
|-----------------|---|
| County Boundary | Township or range Line |
| Access | Township or range line: location doubtful |
| Mine | Section line |
| Non-Mine | Section line: location doubtful |
| Reclaimed | Disturbed |
| Other | Regraded |
| Interstate | Seeded |
| US Route | Released |
| State Route | Excluded |
| Primary Route | PreExisting |
| Secondary Route | Prelaw |
| Main Dirt Road | Bond Area |
| Unimproved Road | SLTLA Mineral Leases |
| Interchange | BLMSaleableMinerals |
| Trail | CommunityPt |
| | SLTLA Mineral Ownership |

DOQ imagery date 2004



0
 Feet
 1:5,000 1 inch equals 417 feet
 Verify Scale

Dept. of Natural Resources
 Division of Oil, Gas, and Mining
 Mineral Mines Program

Different data sources and input scales
 may cause misalignment of data layers.
 This product may not meet DOGM
 standards for accuracy and content.

Denning Construction

13726 S. Hackamore Circle, Draper, Utah 84020
1967 N. Cascade Canyon Drive, St George, Utah 84770
(801) 556-6776 Cel
e-mail rquindennina@hotmail.com

Estimate

Scope of Work: Reclaim the disturbed area of the Brett Clark Mine and revegetate.

Location: Brett Clark Mine, Emery County, Utah

Specifications:

Reclaim all disturbed roads and site consisting of about 4.51 acres.	\$4,321.60
Seal mine portals with solid grouted cmu block.	\$5,200.00
Demolish and haul away existing wood structure.	\$603.80
Revegetate area	\$1,465.75

Total Cost	\$11,591.15
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Payment Schedule: 50% Down - Balance Due upon completion
(Note Any amounts not paid as agreed will be charged a finance charge of 1.5% per month along with all reasonable legal and collection fees.)

Job Guarantee:

This job to be completed in a timely manner. All work to be preformed in a good workmanlike fashion.

Submitted by

February 10, 2010



R Quin Denning

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 1
DESCRIPTION OF THE WORST-CASE RECLAMATION SCENARIO

Reclaim roads and affected site for the Brett Clark Mine.
Grade site to bury or cover existing roads and revegetate.

Bury mine tailings. Remove existing wood structure. Remove
all debris from site.

Seal existing mine portals with concrete block grouted solid.

Assumptions:

All equipment to be removed by owner.

Data Source(s):

Site visit

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 2
STRUCTURE DEMOLITION AND DISPOSAL COSTS

Structures to be demolished:

Item	Construction Material	Volume (cubic feet)	Unit Cost Basis (\$)	Demolition Cost (\$)
Cabin	Wood	572		\$328.80
Subtotal				\$328.80

Other items to be demolished (paved roads, conveyors, utility poles, rail spurs, etc.):

None

Subtotal = \$ _____

Debris Handling and Disposal Costs:

Hauling 1 load \$275.00

Subtotal = \$ \$275.00

TOTAL DEMOLITION AND DISPOSAL = \$ \$603.80

Data Source(s): Site Visit

Project: _____
 Date: _____
 Prepared by: _____

WORKSHEET 3
MATERIAL HANDLING PLAN SUMMARY

Earthmoving Activity	Volume (LCY)	Origin	Destination	Haul Distance (ft)	Grade * (%)	Equipment To Be Used
Mine Tailings	800	Mine Portals	local	126'	1-2%	Back-hoe
* Record grade resistance (% grade) here.						

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 4A
EARTHWORK QUANTITY

Cross-Section/ Station	Distance Between Stations (ft)	End Area (ft ²)	Volume (yd ³)*	Adjust- ment Factor * (%)	Adjusted Volume (LCY)
NA					
TOTALS					

* See discussion of material volume estimates in Chapter 2, Step 2, Part II. B. of the Handbook.
Select adjustment factor based on the state of the material to be moved.

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

**WORKSHEET 4B
EARTHWORK QUANTITY**

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 5
PRODUCTIVITY AND HOURS REQUIRED FOR DOZER USE

Earthmoving Activity: NA

Characterization of Dozer Used (type, size, etc.):

Description of Dozer Use (origin, destination, grade, haul distance, material, etc.):

Productivity Calculations:

$$\begin{aligned} \text{Operating Adjustment Factor} = & \frac{\text{operator}}{\text{factor}} \times \frac{\text{material}}{\text{factor}} \times \frac{\text{efficiency}}{\text{factor}} \times \frac{\text{grade}}{\text{factor}} \\ & \times \frac{\text{weight}}{\text{correction}} \times \frac{\text{production}}{\text{method/blade}} \times \frac{\text{visibility}}{\text{factor}} \times \frac{\text{elevation}}{\text{factor}} = \end{aligned}$$

$$\text{Net Hourly Production} = \frac{\text{normal hourly}}{\text{production}} \text{ LCY/hr} \times \frac{\text{operating adjustment}}{\text{factor}} = \text{LCY/hr}$$

$$\text{Hours Required} = \frac{\text{volume to be moved}}{\text{LCY}} \div \frac{\text{net hourly}}{\text{production}} \text{ LCY/hr} = \text{hr}$$

Data Source(s):

Project: _____
 Date: _____
 Prepared by: _____

WORKSHEET 6 **PRODUCTIVITY AND HOURS REQUIRED FOR DOZER USE—GRADING**

Earthmoving Activity: NA

Characterization of Dozer Used (type, size, etc.):

Description of Dozer Use (% grade, effective blade width, operating speed, etc.):

Productivity Calculations:

$$\begin{aligned} \text{Operating Adjustment Factor} = & \frac{\text{operator}}{\text{factor}} \times \frac{\text{material}}{\text{factor}} \times \frac{\text{efficiency}}{\text{factor}} \times \frac{\text{grade}}{\text{factor}} \\ & \times \frac{\text{weight}}{\text{correction}} \times \frac{\text{production}}{\text{method/blade}} \times \frac{\text{visibility}}{\text{factor}} \times \frac{\text{elevation}}{\text{factor}} = \end{aligned}$$

$$\begin{aligned} \text{Hourly Production} = & \frac{\text{mi/hr}}{\text{average speed}} \times \frac{\text{ft}}{\text{effective blade width}} \times 5,280 \text{ ft/mi} \times 1 \text{ ac/43,560 ft}^2 \\ = & \text{ac/hr} \end{aligned}$$

$$\text{Net Hourly Production} = \frac{\text{ac/hr}}{\text{hourly production}} \times \frac{\text{operating adjustment factor}}{\text{factor}} = \text{ac/hr}$$

$$\text{Hours Required} = \frac{\text{ac}}{\text{area to be graded}} \div \frac{\text{ac/hr}}{\text{net hourly production}} = \text{hr}$$

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 7
PRODUCTIVITY AND HOURS REQUIRED FOR RIPPER-EQUIPPED DOZER USE

Ripping Activity: NA

Characterization of Dozer and Ripper Use:

Description of Ripping (ripping depth, cut spacing, cut length, and material to be ripped):

Productivity Calculation:

$$\text{Cycle Time} = \left(\frac{\text{cut length}}{\text{ft}} \div \frac{88 \text{ ft/min}}{\text{[speed]}} \right) + \frac{\text{fixed turn time}^*}{\text{min}} = \text{min/pass}$$

$$\text{Passes/Hour} = 60 \text{ min/hr} \div \frac{\text{cycle time}}{\text{min/pass}} \times \frac{\text{efficiency factor}}{\text{factor}} = \text{passes/hr}$$

$$\begin{aligned} \text{Volume Cut/Pass} &= \left(\frac{\text{tool penetration}}{\text{ft}} \times \frac{\text{cut spacing}}{\text{ft}} \times \frac{\text{cut length}}{\text{ft}} \right) \div 27 \text{ ft}^3/\text{yd}^3 \\ &= \text{BCY/pass} \end{aligned}$$

$$\text{Hourly Production} = \text{BCY/pass} \times \text{passes/hr} = \text{BCY/hr}$$

$$\text{Hours Required} = \frac{\text{bank volume to be ripped}^{**}}{\text{BCY}} \div \frac{\text{hourly production}}{\text{BCY/hr}} = \text{hr}$$

* Fixed turn time depends upon dozer used. 0.25 min/turn is normal.

** Remember to use the swell factor to convert from bank cubic yards to loose cubic yards when applying these data to Worksheet 5. Calculate separate dozer hauling of ripped material for each lift on that worksheet.

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 8
PRODUCTIVITY AND HOURS REQUIRED FOR LOADER USE

Earthmoving Activity: NA

Characterization of Loader Use (type, size, etc.):

Description of Loader Use (origin, destination, grade, haul distance, etc.):

Productivity Calculations:

$$\text{Cycle time} = \frac{\text{min}}{\text{haul time (loaded)}} + \frac{\text{min}}{\text{return time (empty)}} + \frac{\text{min}}{\text{basic cycle time}} = \text{min}$$

$$\text{Net Bucket Capacity} = \frac{\text{LCY}}{\text{heaped bucket capacity}} \times \frac{\text{LCY}}{\text{bucket fill factor}^*} = \text{LCY}$$

$$\text{Hourly Production} = \frac{\text{LCY}}{\text{net bucket capacity}} \div \frac{\text{min}}{\text{cycle time}} \times \frac{\text{LCY/hr}}{\text{efficiency factor}} \times 60 \text{ min/hr} = \text{LCY/hr}$$

$$\text{Hours Required} = \frac{\text{LCY}}{\text{volume to be moved}} \div \frac{\text{LCY/hr}}{\text{hourly production}} = \text{hr}$$

* See loader section of equipment manual.

Data Source(s):

Project: _____
 Date: _____
 Prepared by: _____

WORKSHEET 9 PRODUCTIVITY AND HOURS REQUIRED FOR TRUCK USE

Earthmoving Activity: NA

Characterization of Truck Use (type, size, etc.):

Description of Truck Use (origin, destination, grade, haul distance, capacity, etc.):

Productivity Calculations:

$$\text{No. Loader Passes/Truck} = \frac{\text{truck capacity}^*}{\text{loader bucket net capacity}} \text{ LCY} \div \frac{\text{LCY}}{\text{no. loader passes/truck}} = \text{passes} \text{ (round down to nearest whole number)}$$

$$\text{Net Truck Capacity} = \frac{\text{loader bucket net capacity}}{\text{no. loader passes/truck}} \text{ LCY} \times \text{LCY} = \text{LCY}$$

$$\text{Loading Time/Truck} = \frac{\text{loader cycle time (from Worksheet 8 or 10)}}{\text{no. loader passes/truck}} \text{ min} \times \text{min} = \text{min}$$

$$\text{Truck Cycle Time} = \text{haul time min} + \text{return time min} + \text{loading time min} + \text{dump and maneuver time min} = \text{min}$$

$$\text{No. Trucks Required} = \frac{\text{truck cycle time min}}{\text{total loading time min}} \div \text{min} = \text{trucks}$$

$$\text{Production Rate} = \frac{\text{net truck capacity LCY}}{\text{no. trucks}} \div \frac{\text{min}}{\text{truck cycle time min}} = \text{LCY/min}$$

$$\text{Hourly Production} = \frac{\text{production rate LCY/min}}{\text{efficiency factor}} \times 60 \text{ min/hr} = \text{LCY/hr}$$

$$\text{Hours Required} = \frac{\text{volume to be moved LCY}}{\text{hourly production LCY/hr}} \div \text{LCY/hr} = \text{hr}$$

* Use the average of the struck and heaped capacities.

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 10
PRODUCTIVITY FOR HYDRAULIC EXCAVATOR USE (BACKHOE OR POWER SHOVEL)

Earthmoving Activities: Move 800 yards to be used a fill for existing cuts.

Characterization of the Excavator Used (type, size, etc.): John Deere 310SG Backhoe

Description of Excavator Used (loading geometry, materials, etc.): JD 310SG Backhoe with a 24" bucket & 3/4 yd front loader bucket.

Productivity Calculations:

$$\text{Net Bucket Capacity} = \frac{.75}{\text{heaped bucket capacity}} \text{ LCY} \times \frac{.85}{\text{bucket fill factor}^*} = .64 \text{ LCY}$$

$$\text{Hourly Production} = \frac{.64}{\text{net bucket capacity}} \text{ LCY} \times 60 \text{ min/hr} \div \frac{.75}{\text{cycle time}^{**}} \text{ min} \times \frac{.75}{\text{efficiency factor}} = 28.80 \text{ LCY/hr}$$

$$\text{Hours Required} = \frac{800}{\text{volume to be handled}} \text{ LCY} \div \frac{28.80}{\text{net hourly production}} \text{ LCY/hr} = 27.78 \text{ hr}$$

* See loader section of the equipment manual.

** See excavator section of equipment manual.

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 11A
PRODUCTIVITY OF PUSH-PULL OR SELF-LOADING SCRAPER USE

Earthmoving Activity: NA

Characterization of Scraper Used (type, capacity, etc.):

Description of Scraper Use (origin, destination, grade, haul distance, capacity, etc.):

Productivity Calculations:

$$\begin{array}{l} \text{Cycle} = \frac{\text{min}}{\text{Time}} = \frac{\text{load time}}{\text{(push-pull is per pair)}} \text{ min} + \frac{\text{min}}{\text{loaded trip time}} + \frac{\text{min}}{\text{maneuver and spread time}} + \frac{\text{min}}{\text{return trip time}} = \frac{\text{min}}{\text{(push-pull is per pair)}} \end{array}$$

$$\text{Hourly Production} = \frac{\text{LCY}}{\text{capacity}^*} \times 60 \text{ min/hr} \div \frac{\text{min}}{\text{cycle time}} \times \frac{\text{efficiency factor}}{\text{(push-pull is per pair)}} = \frac{\text{LCY/hr}}{\text{(push-pull is per pair)}}$$

$$\text{Hours Required} = \frac{\text{LCY}}{\text{volume to be handled}} \div \frac{\text{LCY/hr}}{\text{net hourly production}} = \text{hr}$$

* The average of the struck and heaped capacities; use total for two scrapers for push-pull.

Data Source(s):

Project: _____
 Date: _____
 Prepared by: _____

WORKSHEET 11B PRODUCTIVITY OF DOZER PUSH-LOADED SCRAPER USE

Earthmoving Activity: NA

Characterization of Scraper Used (type, capacity, etc.):

Description of Scraper Use (origin, destination, grade, haul distance, capacity, etc.):

List Pusher Tractor(s) Used:

Describe Push Tractor Loading Method (see figure on next page):

Scraper Productivity Calculations:

$$\text{Cycle Time} = \frac{\text{min}}{\text{load time}} + \frac{\text{min}}{\text{loaded trip time}} + \frac{\text{min}}{\text{maneuver and spread time}} + \frac{\text{min}}{\text{return trip time}} = \text{min}$$

$$\text{Hourly Production} = \frac{\text{LCY}}{\text{capacity}^*} \times 60 \text{ min/hr} \div \frac{\text{min}}{\text{cycle time}} \times \frac{\text{efficiency factor}}{\text{efficiency factor}} = \text{LCY/hr}$$

$$\text{Hours Required} = \frac{\text{LCY}}{\text{volume to be handled}} \div \frac{\text{LCY/hr}}{\text{hourly production}} = \text{hr}$$

* Use the average of the struck and heaped capacities.

Push Tractor Productivity Calculations:

$$\text{Pusher Cycle Time} = \frac{\text{min}}{\text{scraper load time}} \times \frac{\text{pusher factor}}{\text{pusher factor}} = \text{min}$$

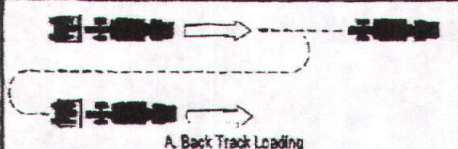
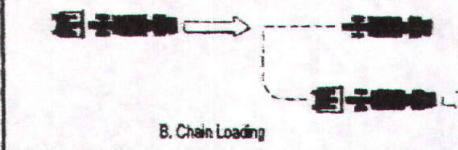
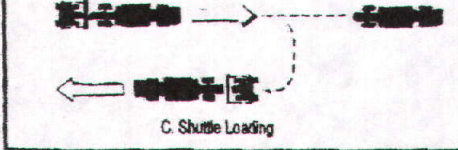
$$\text{Scrapers/Pusher} = \frac{\text{min}}{\text{scraper cycle time}} \div \frac{\text{min}}{\text{pusher cycle time}} = \text{scrapers}$$

$$\text{Pusher Hours Required} = \frac{\text{hr}}{\text{scraper hours}} \div \frac{\text{scrapers per pusher}}{\text{scrapers per pusher}} = \frac{\text{hr}}{\text{(round up)}}$$

Data Source(s):

Project: _____
 Date: _____
 Prepared by: _____

WORKSHEET 11B (continued)
PRODUCTIVITY OF DOZER PUSH-LOADED SCRAPER USE

PUSHER FACTORS	Single Push	Tandem Push
 A. Back Track Loading	1.5	2.0
 B. Chain Loading	1.3	1.5
 C. Shuttle Loading	1.3	1.5

Modified from Terex, 1981.

The following disclaimer pertains to the above illustration from Terex, "Production and Cost Estimating of Material Movement and Earthmoving Equipment."

This manual is a fundamental text on estimating the production and cost of moving materials. It is intended for people associated with the construction industry who prepare job estimates or who evaluate the performance of earthmoving equipment and related costs.

The manual can be used as a supplementary text in those schools and colleges offering formal training in earthmoving techniques. A metric version of this manual is also available.

It will also serve as a reference for those professional consulting engineers who prepare complete job analyses, of which the earthmoving fundamentals covered in this text are only one element.

Estimating the production and costs of earthmoving equipment is not an exact science. While this manual outlines the basic factors or parameters on which estimates can be made, the user must make judgements, and must apply his own experience and know-how to temper the estimate.

This manual, prepared by TEREX, deals with rubber-tired and track-laying equipment, and does not attempt to deal with other forms of earthmoving or production. While the formulas and other guides in this manual are entirely satisfactory for most earthmoving jobs, the reader should note that more sophisticated haulage analyses can be quickly accomplished through the use of a computer.

While efforts have been made to utilize percentages, formulas, and other notations in this manual which reflect actual on-the-job conditions, none of the statements in this manual, or the illustrative figures given for machine life, or the costs for owning and operating earthmoving equipment, or the production of such earthmoving equipment should be construed as any form of guarantee that these machines will have any such specific service life, or production capabilities, or that costs related to their ownership and operation will be as indicated.

Data Source(s): TEREX AMERICAS, Tulsa, OK 74107, (918) 445-5802.

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 12
PRODUCTIVITY AND HOURS REQUIRED FOR MOTORGRADER USE

Earthmoving Activity: Grading roads and site to match terrain.

Characterization of Grader Used (type, size capacity, etc.): John Deere 670G Grader

Description of Grader Route (push distance, grade, effective blade width, operating speed, etc.):

Push distance of 156' a blade width of 12' and operating speed of 2.4 mph to 28.1 mph.

Productivity Calculations:

Grading

$$\begin{aligned} \text{Hourly Production} &= \frac{5}{\text{average speed}} \text{ mi/hr} \times \frac{12}{\text{effective blade width}} \text{ ft} \times 5,280 \text{ ft/mi} \times 1 \text{ ac}/43,560 \text{ ft}^2 \\ &\times \frac{20\%}{\text{efficiency factor}} = 1.46 \text{ ac/hr} \end{aligned}$$

$$\text{Hours Required} = \frac{4.51}{\text{area to be graded}} \text{ ac} \div \frac{1.46}{\text{hourly production}} \text{ ac/hr} = 6.59 \text{ hr}$$

Scarification

$$\begin{aligned} \text{Hourly Production} &= \frac{\text{NA}}{\text{average speed}} \text{ mi/hr} \times \frac{\text{scarifier width}}{\text{scarifier width}} \text{ ft} \times 5,280 \text{ ft/mi} \times 1 \text{ ac}/43,560 \text{ ft}^2 \\ &\times \frac{\text{efficiency factor}}{\text{efficiency factor}} = \text{ac/hr} \end{aligned}$$

$$\text{Hours Required} = \frac{\text{area to be scarified}}{\text{area to be scarified}} \text{ ac} \div \frac{\text{hourly production}}{\text{hourly production}} \text{ ac/hr} = \text{hr}$$

Total Hours Required

$$\text{Total Hours} = \frac{6.59}{\text{grading hours required}} + \frac{\text{scarification hours required}}{\text{scarification hours required}} = 6.59 \text{ hr}$$

Data Source(s):

Project: _____
 Date: _____
 Prepared by: _____

WORKSHEET 13
SUMMARY CALCULATION OF EARTHMOVING COSTS

Equipment *	Ownership & Operation Cost (\$/hr)	Labor Cost (\$/hr)	Total Hours Required **	Total Cost *** (\$)
Backhoe	\$95.00	\$25.00	27.78	\$3,333.33
Grader	\$125.00	\$25.00	6.59	\$988.27
Grand Total				\$4,321.60
* Include all necessary attachments and accessories for each item of equipment. Also, add support equipment such as water wagons and graders to match total project time as appropriate. ** Account for multiple units in truck and/or scraper teams. *** To compute Total Cost: Add Ownership & Operation Cost and Labor Cost columns then multiply by Total Hours Required column.				

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 14 REVEGETATION COSTS

Name and Description of Area To Be Revegetated:

Description of Revegetation Activities:

Cost Calculation for Individual Revegetation Activities:

Initial Seeding

$$\frac{4.51}{\text{area to be seeded}} \text{ ac} \times \left(\$ \frac{75.00}{\text{seedbed preparation}} / \text{ac} + \$ \frac{250.00}{\text{seeding, fertilizing \& mulching}} / \text{ac} \right) = \$ 1,465.75$$

Planting Trees and Shrubs

$$\frac{\text{NA}}{\text{area to be planted}} \text{ ac} \times \left(\$ \frac{\quad}{\text{planting}} / \text{ac} + \$ \frac{\quad}{\text{herbicide treatment}} / \text{ac} \right) = \$ \quad$$

Reseeding

$$\frac{\text{NA}}{\text{area to be seeded \& unreleased disturbed areas}} \text{ ac} \times \frac{\quad}{\text{failure rate}^*} \times \left(\$ \frac{\quad}{\text{seedbed preparation}} / \text{ac} + \$ \frac{\quad}{\text{seeding, fertilizing \& mulching}} / \text{ac} \right) = \$ \quad$$

Replanting Trees and Shrubs

$$\frac{\text{NA}}{\text{area to be planted \& unreleased disturbed areas}} \text{ ac} \times \frac{\quad}{\text{failure rate}^*} \times \left(\$ \frac{\quad}{\text{planting}} / \text{ac} + \$ \frac{\quad}{\text{herbicide treatment}} / \text{ac} \right) = \$ \quad$$

Other Necessary Revegetation Activities

(Examples of other activities that may be necessary include soil sampling, irrigation, and rill and gully repair. Describe each activity and provide a cost estimate with documentation. Use additional worksheets if necessary.)

Other Costs = \$ NA

TOTAL REVEGETATION COST = \$ 1,465.75

* Identify failure rate and basis. If anticipated failure rates vary within the area proposed for disturbance, use a separate worksheet for the area subject to each failure rate.

Data Source(s):

Project: _____
Date: _____
Prepared by: _____

WORKSHEET 15
OTHER RECLAMATION ACTIVITY COSTS

(Subsidence damage repair costs, water supply replacement costs, funds required to support long-term treatment of unanticipated acid or ferruginous mine drainage, etc.)

Description of Reclamation, Repair or Pollution Abatement Activity:

Seal 3 mine portals with solid grouted cmu block.

Portal 1 8' X 8' opening 64 sq ft

Portal 2 8' X 8' opening 64 sq ft

Portal 3 8' X 10' opening 80 sq ft

 Total 208 sq ft

Assumptions:

Cost Estimate Calculations:

208 sq ft x \$25.00 per sq ft = \$5,200.00

TOTAL COSTS = \$ 5,200.00

Other Documentation or Notes:

(Include additional sheets, maps, calculations, etc., as necessary to document estimate.)

Data Source(s):